

24 November 2014

Mr. Michael Zehner
Planning Director
Town of Wellesley
525 Washington Street
Wellesley, MA 02482

RE: TOLLES –PARSONS SENIOR CENTER PROJECT OF SIGNIFICANT IMPACT ANALYSIS

Dear Michael:

In order to provide supplementary information to the Tolles-Parsons Center Project of Significant Impact application, dated October 14, 2014, Catlin + Petrovick Architects offer the following information regarding impacts of the Tolles-Parsons Center development at 494 and 496 Washington Street with regard to the Town of Wellesley's municipal systems.

Domestic Water

The proposed site previously accommodated two buildings: the American Legion Hall, a three story former residential building, and a three-family six-bedroom house. The domestic demand of the new senior center would not exceed the demands by these previous structures and therefore should not be an issue with the capacity of the existing municipal 10" water line. Total GPD water usage is estimated to be 2,968. A 2-inch water meter can serve the water demand usage.

Fire Protection

We would expect to have an updated fire flow test preformed prior to final design to verify that there is adequate pressure at the street to meet the requirements of the fire protection system for the new building. If, for some unforeseen reason, there was not adequate pressure we would provide a fire pump at the building to meet the necessary requirements.

Fire Hydrant

The location shown for the fire hydrant was one that was chosen by the Fire Department.

Sanitary Pipe

The existing sanitary sewer pipe from 494 Washington Street to Atwood Street is an 8-inch clay pipe. The Town performed a CCTV inspection of the exiting 8-inch sewer pipe, which showed root intrusion and pipe sagging. The documents will indicate the sanitary sewer pipe be lined from SMH2 to Atwood street.

The survey work performed at the two lots indicates an existing 4-inch sanitary line from 490 Washington Street to the SMN on the property and a second 4-inch line that once served the American Legion Building. These lines will be removed and a new 4-inch line will connect from the proposed center to the existing 8-inch clay sewer pipe leading to Atwood Street.

The existing sewer line handled the present three-family six-bedroom residence (being demolished) with a rate of approximately 1200gal/day as well as the former American Legion Hall structure with a flow rate of approximately 1100gal/day. The proposed new center will have an estimated waste flow of 2,375gal/day peak. The 8-inch sewer pipe has a capacity of approximately 430gpm.

Refuse

The means of refuse disposal had been reviewed with the user group as well as DPW. It is anticipated that there would be two pickups per week for trash disposal. There would be four 65gal wheeled trash containers stored inside. Food waste would be disposed of via a commercial garbage disposal.

Please find attached our civil engineer's comments.

Sincerely,
Catlin + Petrovick Architects, PC

John Catlin

John Catlin, AIA
Partner: MA Arch License #4461

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**TOWN OF WELLESLEY
TOLLES –PARSONS SENIOR CENTER
PROJECT OF SIGNIFICANT IMPACT ANALYSIS
November 24, 2014**

This memorandum provides additional stormwater impact analyses specific to the Washington Street drainage system and supplements the **Stormwater Drainage Report and Stormwater Management Plan** dated October 14, 2014 submitted by DeVellis Zrein Inc.

The ability for a drainage system to handle stormwater flow is analyzed using the rate at which stormwater enters the drainage system. The flow rate is calculated in cubic feet per second (cfs).

Currently, all of the site stormwater runoff that enters onto Washington Street (70 percent of the site) is collected by one catch basin in the gutter of Washington Street that is located at the southwest corner of the site. This catch basin is connected into the 12-inch main drain line located beneath Washington Street. This catch basin will remain.

However, the site runoff that directly flows onto Washington Street from the site has been eliminated. Stormwater flows are collected and detained (detention system) and retained (infiltration system) on site. During the very large and infrequent storms, the overflow (through a 5-inch opening from the system outlet at the detention/retention system) enters into the main storm drain located beneath Washington Street at a much-reduced rate.

A summary of flow to the Washington Street drainage system is as follows:

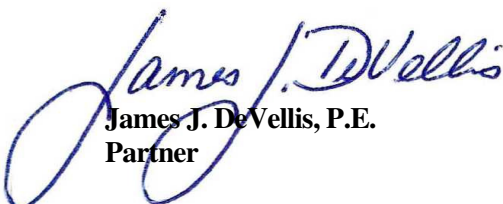
- ✓ 2-year storm decreased from 0.16 cfs to zero
- ✓ 10-year storm decreased from 0.72 cfs to 0.34 cfs (50%+/- reduction)
- ✓ 25-year storm decreased from 0.95 cfs to 0.49 cfs (50%+/- reduction)
- ✓ 100-year storm decreased from 1.64 cfs to 1.15 cfs (70%+/- reduction)

Ref: p 13 Stormwater Drainage Report and Stormwater Management Plan

Engineering practice dictates that when stormwater runoff leaves a site under proposed conditions, an applicant is responsible to match the existing peak rates of runoff to all off site areas to assure that whatever the conditions are downstream (at the immediate connection point or abutting properties anywhere further downstream) are not exacerbated. The stormwater flow from the project into the municipal system is eliminated for the frequent storms and substantially reduced for the larger and less frequent storm events.

The municipal drainage system will continue to function in the same manner, with a reduced flow from the project.

Sincerely,
DEVELLIS ZREIN INC.



James J. DeVellis, P.E.
Partner